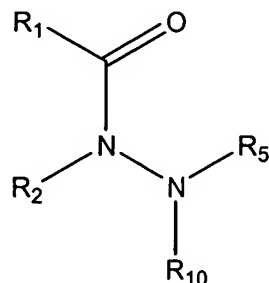


## ABSTRACT OF THE DISCLOSURE

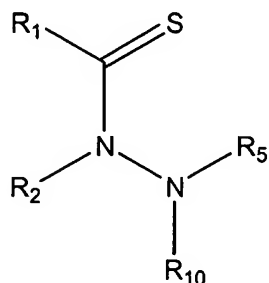
Disclosed is a method of preparing a thiohydrazide product compound from a hydrazide starting compound. The hydrazide starting compound is represented by Structural Formula (I):

5



(I).

The thiohydrazide product compound is represented by Structural Formula (II):



(II).

- 10 In Structural Formulas (I)-(II), R<sub>1</sub> and R<sub>2</sub> are independently an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group, or R<sub>1</sub> and R<sub>2</sub> taken together with the carbon and nitrogen atoms to which they are bonded, form a non-aromatic heterocyclic ring optionally fused to an aromatic ring. When R<sub>2</sub> is an aryl group or a substituted aryl group, then R<sub>5</sub> is a hydrazine protecting group; and when R<sub>2</sub> is an aliphatic or substituted
- 15 aliphatic group, then R<sub>5</sub> is -H or a hydrazine protecting group. R<sub>10</sub> is -H or a substituted or

unsubstituted alkyl group. The method comprising the step of reacting the starting compound with a thionylating reagent.